

# Stages

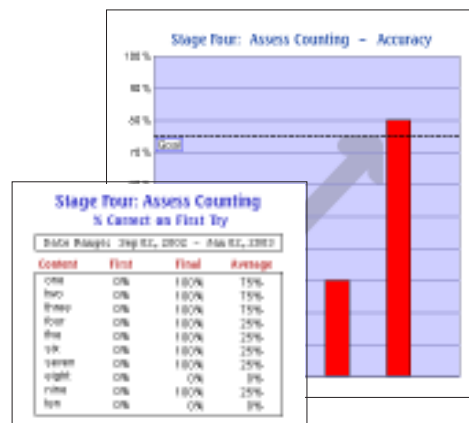
## Assessment Software



*based on the Stages framework by Madalaine Pugliese*

including

## Stages Report Wizard



Quickly show learner progress over time.

**Author of the Stages Framework**

Madalaine Pugliese

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Stages Report Wizard Version 1.1

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The Table of Contents for Stages Report Wizard is in its own section of this binder.

# About the Author



## **Madalaine Pugliese, MS, Ed.S. The Assistive Educator**

Ms. Pugliese has over 30 years of experience in public education, and is a nationally recognized speaker and authority in the fields of assistive and educational technology. She currently serves as Director of the Assistive Technology Program at Simmons College in Boston.

She has served on several advisory and executive boards: the U.S. Department of Education (proposal advisor), the Technology and Media Division of the Council for Exceptional Children, the Disabled User Group for the Boston Computer

Society, and the National Science Foundation's DREAMS (Disability Research Encompassing American Indians in Math and Science). Ms. Pugliese has served as the National Special Needs Advisor for Apple Computer's Educational Grants Program and also as an advisor to IBM in its well-regarded Vision Test study.

Her achievements include:

- Program Director for Assistive Special Education Technology and Instructor in Special Education, Simmons College, Boston, MA.
- Former Director of the Assistive Technology Project of the Massachusetts Department of Education.
- Recognized as Laureate in the Computerworld Smithsonian In Search of New Heroes Award Program: Assistive Technology Project (Massachusetts Department of Education), 2000; Stages (Assistive Technology, Inc.), 2001.
- Presented a PathFinder Award by the Massachusetts Computer Using Educators (MassCUE), November 2004
- Distinguished Educator Award from Apple Computer, Inc., 1999
- Named as a "Shaper of the Future" by Converge Magazine, September 1999
- Co-director of Camp Apple, an intensive training retreat for educators on new instructional technology
- Named one of the Ten Most-Influential Assistive Technology Specialists in the country by Microsoft/IntelliTools partnership
- Founder of Adaptive Rehabilitation Technology, a nonprofit organization offering information and resources for families and individuals with needs for adaptive technologies
- Ed.S. degree: Assistive Technology (Simmons College). Three Master's degrees: Curriculum/Administration of Education (Suffolk University), Special Education (Simmons College), and Educational Technology (Lesley University).

# Getting Started

## About the Stages Assessment Software Kit

Welcome to the Stages Assessment Software Kit. This Kit gives you all the tools you need to address the seven developmental Stages in the cognitive and language development of learners with special needs. Included are interactive computer activities for each Stage that serve as an informal assessment tool, observation forms to help you understand and work with the learner, and feature comparison charts of recommended software to help you choose appropriate programs for your learners.

Start by becoming familiar with the concept of assessment activities as well as with the characteristics of a learner at each of the seven Stages. It is important to understand the learner before you begin. Read the **Introduction** and the chapter for each Stage before jumping right to the activities. Then continue to use this guide to explore the assessment activities, observe learners using them, and interpret the results of your observations.

This **Introduction** helps you get started and gives you an overview of Stages.

The section for each Stage contains the following:

- The chapter excerpted directly from the book *Stages: Software Solutions for Special Needs, Second Edition*, by Madalaine Pugliese, helps you understand a learner at each Stage and suggests off-computer activities and software features that are important at that Stage.
- An **Overview of the Activities** describes the activities at each Stage.
- **Presenting the Activities** gives you a better understanding of how to approach your informal assessment sessions with a Stages learner.
- **Observing the Learner** helps you understand the results of using the activities.

- **Practice Software** helps you use recommended software with a Stages learner.
- The **Software Comparison Chart** helps guide you to software that is appropriate for your learner.

The **Glossary/Q&A** section helps you understand terms used in this guide and provides assistance using the CD or running the activities.

**Stages Report Wizard** is a powerful way to show learner progress over time. This software tool automatically generates graphs and content tables from your learners' saved Stages reports, so be sure to save reports for every Stages activity. The complete User Guide for Stages Report Wizard is found in the last section of this binder.

## System Requirements

The Stages Assessment CD is designed to run on Macintosh® and Windows® computers with the following configurations.

### *Macintosh® computer:*

- Power Macintosh running System 9.x or higher
- CD-ROM drive
- color monitor
- 16 MB of RAM

### *Windows® computer:*

- Intel® Pentium® 90 or equivalent processor
- Windows 95/98/2000/XP/NT version 4.0 or later
- CD-ROM drive
- color monitor
- 16 MB of RAM

## Using this CD



This binder came with a Stages All-in-One CD, plus the Stages Report Wizard CD. (For information on using Stages Report Wizard, please refer to the section devoted to it at the end of this binder.)

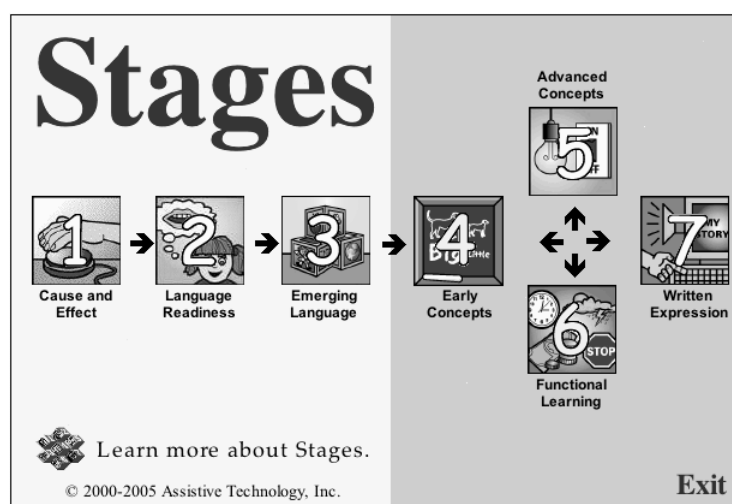
To begin using the assessment activities, place the Stages CD in your computer's CD-ROM drive with the label facing up. The program should automatically begin after you insert the CD. If the program does not begin, follow these steps to run it:

**Macintosh:** Double-click the icon for the CD, then double-click the icon labeled “Stages” (or the name of the Stage).

**Windows:** Double-click the icon on your Desktop labeled “My Computer.” Then double-click the icon for the CD drive, labeled “Stages CD”. Finally, double-click the icon for the CD drive labeled “Stages” (or the name of the Stage) to start the program.

You can also copy the entire contents of the CD to your hard drive, although you will still be required to keep the Stages CD in the drive while you use the program. (For Macintosh users: depending on the OS your Macintosh is running, you will need to open either the OS X or Classic folder, then double-click the Stages icon there to start Stages.)

As the Stages CD starts up, a title screen is displayed while the program loads. Then you will see this Main Menu screen:



Click the button for any numbered icon to begin the assessment activities for that Stage. To return to this Main Menu after choosing any Stage, select Choose a New Stage from the File menu or click the Exit button at the end of the report. To end your Stages session, choose Quit from the File menu or click the word Exit at this Main Menu screen.

For more about the Stages framework and its components, click on “Learn more about Stages”. Refer to the section in this binder for each Stage to learn about the activities and how get the most out of using Stages with your learners.

## Exploring the Stages CD



The Stages CD contains folders with additional useful tools. Because the Stages CD autoplays when you insert the CD, you may need to quit Stages in order to access its contents.

On the Macintosh, quit Stages, then double-click the icon for the CD to view its contents.

On a Windows computer, you can prevent the CD from autoplays by holding down the Shift key as you insert the CD. Continue to press Shift until the CD-ROM drive stops whirring (about 15 seconds). To view the contents of the CD, double-click the Desktop icon labeled “My Computer.” Then right-click the icon for the CD drive and choose “Explore”.



Observation  
Forms

**Observation Forms:** This folder contains PDF files and Microsoft® Word template documents of the Observation Form for each Stage. You may find it more convenient to print these files rather than making copies of the forms in the User Guides. You can type your observation notes into the Word documents. For more information, refer to the Read Me file in this folder.

Acrobat® Reader from Adobe is required to view the PDF files. An Adobe Reader installer is provided in this folder.



Overlays

**Overlays:** This folder contains overlays for use with the IntelliKeys® keyboard from IntelliTools, Inc. The overlays are loaded automatically when the software detects that an IntelliKeys is connected. You can use either a USB or Classic IntelliKeys.

Also in this folder are Read Me files and tools for Windows and Macintosh Classic users (Overlay Printer and Overlay Sender). Macintosh OS X users can print overlays from the PDF files provided in this folder.

For complete information about using IntelliKeys with Stages, please refer to the Read Me files in this folder.



IntelliKeys

**IntelliKeys (Macintosh only):** This folder contains files that Stages will automatically copy to your hard drive so that it can recognize your IntelliKeys keyboard. For more information, please refer to the Read Me files in this folder.

# Overview

## What is Stages?

Stages is a framework that defines and describes seven stages in a learner's cognitive and language development in the context of software selection. The seven stages are developmental in nature. They are not age or grade specific, and not all learners will reach Stage Seven. The appropriate stage for a learner is one where he or she is challenged, but not overwhelmed or frustrated.

Screening activities, or assessment activities, identify some skills that are characteristic of learners at each stage. The recommended software titles help learners practice the skills they need.



### Stage One ❖ Cause and Effect

In Stage One, the learner is just starting to focus on the screen. She begins to understand that activating her input device—switch, mouse, keyboard, touchscreen, etc.—makes something happen and that she has control over the computer.



### Stage Two ❖ Language Readiness

In Stage Two, the learner is exposed to language. He learns that objects have names and that actions have words to express them. The learner is not asked to identify objects, but rather to be a sponge and absorb information.



### Stage Three ❖ Emerging Language

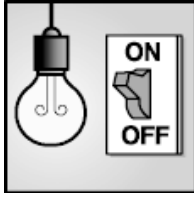
At Stage Three, the learner begins to show us what she has learned in Stage Two. She can identify objects and place them in categories. This is the first stage in which the learner is asked to make a selection based on a prompt.



### Stage Four ❖ Early Concepts

Stage Four is a major turning point in the learner's development, both academically and socially. The learner works on traditional readiness skills such as letter identification, counting skills, pattern recognition, and cooperative play.





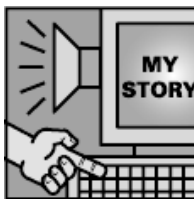
### Stage Five ❖ Advanced Concepts and Communication

At Stage Five, the learner embarks on a lifelong academic journey. Prepared by academic readiness skills in Stage Four, she can now continue her education in all subject areas that are appropriate and interesting to her.



### Stage Six ❖ Functional Learning

The Stage Six learner begins to acquire the skills that will allow him to become more independent in the real world. For example, he learns how to dress appropriately, use money, tell time, and read signs.



### Stage Seven ❖ Written Expression

The Stage Seven learner is ready to express herself in writing. She can read and identify letters and can now put her thoughts into words. She may ultimately use her writing skills in higher education or at work.

## Why are Alternative Assessment Strategies Important?

Understanding the functional capabilities of learners has become important for parents and educators alike. Gathering data on the performance of learners with cognitive and language delays can be a daunting challenge. Standardized tests are typically inappropriate tools. The phrase “alternative assessment” appears in the assessment provisions of the reauthorized IDEA, requiring that all states have alternative assessments in place by July 1, 2000.

Discussions among special education professionals center around several aspects of alternative assessment. For example, the Fall 1999 issue of the *Journal of Special Education Leadership* focuses on standards, assessment, and instructional accountability. Topics include the validity of the results of large-scale standardized tests, how to determine which learners require accommodations and modifications, how to design appropriate alternative measures, and how curriculum-based materials may determine the effectiveness of instruction.

Another example of how important alternative assessment strategies have become is the number of articles on the subject published in *The TAM Connector*. This journal is designed for educators who embrace the use of assistive technology in their



practice or who research the efficacy of assistive technology interventions. Topics discussed in the Fall 1999 issue include computerized assessment and ways to use technology to accommodate modifications for learners with special needs.

## **Stages as an Alternative Assessment Option**

Stages has evolved over several years to become the framework for a set of solutions designed to address today's pressing need for alternative curriculum and assessment strategies for individuals with language and cognitive delays.

Assessment is critical to screen and identify a learner's skills. Another purpose of assessment is to gather information so that an Individualized Educational Plan (IEP) can be developed and appropriate curriculum planning can be facilitated. Technology is a wonderful vehicle to consider when designing access to an assessment environment.

The Stages book offers a way to facilitate that body of knowledge. The **Observable Characteristics** that are presented can provide an informal way to determine a learner's status on the Stages continuum by observing specific behavior. The **Competency Goals** can serve as an informal measure of a learner's progress within a set of skills. Using the book alone to guide observations can informally help determine a learner's functional Stage. Chapter One of the Stages book is included in this guide.

The more formal diagnostic activities in the Assessment Software Kits can also help guide observations by providing ways to identify skills that a learner needs to practice and to measure her progress.

## **Stages and Alternate Assessment Portfolios**

In response to the requirement to provide a means of assessing all students, many states have elected to include a portfolio-based assessment option. Stages assessment activities can provide valuable data for inclusion in a learner's Alternate (or Alternative) Assessment portfolio.

Professionals who work with a learner gather work samples and other products that show achievement of the learner's IEP

**STAGES REPORT  
WIZARD  
generates  
graphs, content  
mastery tables,  
and detailed  
summaries that  
show learner  
achievement  
over time.**

goals. The resulting portfolio, which may be in electronic or paper format, is then reviewed to determine how well the learner has met these goals. Portfolios are a valuable way to document a learner's skill acquisition over time.

Each state with an alternative assessment system in place has its own guidelines for generating portfolios. In most cases, these guidelines define the types of evidence, or types of documents, that can be included in portfolios. Evidence is usually classified by the portfolio guidelines as Primary or Secondary in nature.

Primary evidence is data that proves a learner's achievement of a goal. An example of primary evidence might be a product of the student's work, a video of a student accomplishing the activity, or a software report that includes data that reflects the student's achievement.

Secondary evidence is data that demonstrates probable achievement, such as a still photograph of a learner at a task or a teacher's observation of the learner's performance.

Some states advise that formal assessments not be used to document a learner's achievement. They prefer that daily instructional software be used so that the learner is not placed in an unfamiliar setting at a crucial time to demonstrate his knowledge.

However, keep in mind that Stages is not a formal assessment, but rather a set of informal benchmark activities designed on an instructional model that provides feedback and coaching. The learner will have already encountered these activities during prior benchmark assessments. The Stages philosophy recommends the learner use practice software to build skills, periodically returning to the Stages benchmark activities to assess progress. The data generated using these activities can serve as primary evidence in the learner's portfolio.

During Stages software activities, the instructor can print directly from any screen to capture a learner-generated product. At the end of each activity, a report with instructional data about the time spent, choices made, response accuracy or work product, input method, prompt type, and time/date stamp are

displayed with the learner's name. The instructional team member can then print that screen or save the information as a text-format electronic file. In addition, observation forms recorded by the teacher during Stages activities may be included in the portfolio.

The software recommended in the Software Comparison Chart in this guide can also be used to collect evidence for portfolios. When the learner is using the computer, videos and screenshots can capture their achievements. Include in the portfolio information about access solutions and software settings.

**Download documents that show how Stages connects to your state's curriculum standards.**

Some states provide curriculum standards for special education students that differ from the mainstream standards. Because Stages activities cover core curriculum areas, they often correlate directly to a state's general and alternate standards. Assistive Technology, Inc. (ATI) has produced documents that tie Stages activities to curriculum standards in every state. These documents are available in PDF format at [www.assistivetech.com/p-stages-correlations.htm](http://www.assistivetech.com/p-stages-correlations.htm).

A portfolio-based alternative assessment can help you evaluate a learner's best environment for success and plan for future learning and recreational activities.

## **How the Law Supports Assistive Technology in Public Education**

IDEA, the Individuals with Disabilities Education Act (Public Law 94-142 and its amendments), guarantees the right of all children with special needs to a free and appropriate education in the least restrictive environment. In developing an Individualized Educational Plan (IEP), parents, teachers, and administrators are required to consider any assistive technologies that may be useful in helping a child meet the objectives stated in the IEP.

Equally critical is a need for people who are competent in the use of assistive technologies to serve as members of the team that develops the IEP. It is a clear violation of IDEA to permit those with limited expertise to play a role in the decisions made about what technology could be provided that might lead to successful inclusive placements.

**It is a clear violation of IDEA to permit those with limited expertise to help decide what technology might lead to eventual success.**

These Federal regulations also specify that a variety of services need to be considered when designing assistive technology activities. These might include: assessing a child's needs for assistive technology; purchasing or borrowing assistive technology for students; planning for assistive technology services; providing technical support for the students who use assistive technology; and offering professional development for service providers, who will increasingly be called upon for more information and expertise about the implementation of assistive technology.

Consultants and manufacturers can provide information about the specific functions and capabilities of devices, but may not have the expertise or adequate perspective to compare devices from a variety of other sources or, more importantly, comment on the learning or developmental needs of the child. Such equipment can play an important role in helping to provide individualized learning experiences.

**Assistive technology is no longer discretionary.**

## **Computer Access and Platforms**

Using adaptive devices or alternative input hardware can be an involved process. Be sure that the learner has a complete and current Assistive Technology Assessment with a team of professionals to ensure that he or she is using the most effective access method(s), and is working in the optimal environment for success. Some software is designed to permit easy setup for using alternative devices. Watch for specialty menu options that make using such built-in devices relatively simple.

Since the purpose of this guide is to discuss learner behavior and appropriate software, adaptive access to the computer is not covered in detail. A formal assistive technology evaluation is needed to ensure the proper individualized solutions. For example, the correct position of the learner and the access device in the work environment is essential for success. This is just one consideration in the formal assessment process.